

**ABSTRACT**

If, in encoding and recording an AV stream, `time_controlled_flag` as the attribute information is set to 1, the relation between the time lapse of an AV stream and the amount of data bytes of the AV stream is linear within a preset error range. If the `time_controlled_flag` of the AV stream file is set to 1, and a certain time portion of the stream is erased by way of partial stream erasure, an unoccupied area corresponding to the erased time portion and which can be recorded at a bitrate indicated by `TS_average_rate` may be created on the disc.